Instrument–subject alternation from a lexical-pragmatic perspective

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Instrument–subject alternation

- a verb's semantic argument with an instrument thematic role can be expressed syntactically not only as an adverbial phrase but also as a subject instead of an agentive subject

(1) (a) Rita betörte egy hajszárítóval az ablakot.
    'Rita broke the window with a hair dryer.'
  (b) A hajszárító betörte az ablakot.
    'The hair dryer broke the window.'
(2) (a) Rita megszárította egy hajszárítóval az ablakot.
    'Rita dried the window with a hair dryer.'
  (b) A hajszárító megszárította az az ablakot.
    'The hair dryer dried the window.'

(3) (a) Rita megrakta egy targoncával a teherautót.
   'Rita loaded the truck with a forklift.'
   (b) A targonca megrakta a teherautót.
   'The forklift loaded the truck.

(4) (a) Rita felmosta egy felmosóronggyal a padlót.

　　'Rita washed the floor with a floor-cloth.'

　(b) *A felmosórongy felmosta a padlót.

　　'The floor-cloth washed the floor.'

(5) (a) Rita felsöpörte egy söprűvel a padlót.

　　'Rita swept the floor with a broom.'

　(b) *A seprű felsöpörte a padlót.

　　'The broom swept the floor.'

Explaining various syntactic alternations

- manner of motion vs. directional motion

  float/swim (in the river) vs. *float/swim into the cave*

1. one more semantic argument in the second variant (Levin 1993: 264–267)

2. a directional argument is substituted for a location argument (both arguments are related to each other) (Bibok 2010)

- locative alternation: semantic arguments with two distinct roles

  smear butter on the bread vs. *smear the bread with butter*

1. two entries of one and the same verb (Pinker 1989)

2. one meaning representation underspecified wrt. two constructional meanings (Iwata 2002, Bibok 2014)

smear (X, Y, on Z) or *smear (X, Y, on Z)*

'X causes a mass Y to move onto a surface Z, and X causes a

surface Z to be covered partially or totally with a mass Y'

- instrument–subject alternation

1. a semantic argument fulfils either an instrument role or an agentive role (Schlesinger 1989)

2. intermediary vs. facilitating (enabling) instruments (Levin 1993: 80–81)

(1a), (2a), (3a) vs. (4a), (5a)

broke/dried the window with a hair dryer – intermediary

loaded the truck with a forklift – intermediary →

alternation √

The hair dryer broke/dried the window.

The forklift loaded the truck.

washed/swept the floor with a floor-cloth/broom –
facilitating instruments →

alternation Ø

The floor-cloth washed the floor.
The broom swept the floor.

3. result verbs – manner verbs (Rappaport Hovav and Levin 1998)

Dudchuk 2007

result verbs → intermediary instruments

manner verbs → facilitating instruments

- independently of classifying verbs into manner and result groups,

  one and the same verb takes both kinds of instruments,

  but only intermediary instruments occur in the instrument–subject alternation

Result verbs

(7) (a) Rita megrakta egy targoncával a teherautót.

'Rita loaded the truck with a forklift.'

(b) A targonca megrakta a teherautót.

'The forklift loaded the truck.'

(8) (a) Rita megrakta egy villával a teherautót.

'Rita loaded the truck with a pitchfork.'

(b) *A villa megrakta a szekeret.

'The pitchfork loaded the truck.'

Manner verbs

(9) (a) Rita felmosta egy felmosóronggyal a padlót.

      'Rita washed the floor with a floor-cloth.'

   (b) *A felmosórongy felmosta a padlót.

      'The floor-cloth washed the floor.'

(10) (a) Rita felmosta egy takarítógéppel a padlót.

      'Rita washed the floor with a cleaning machine.'

   (b) A takarítógép felmosta a padlót.

      'The cleaning machine washed the floor.'

Result/manner verbs

(11) (a) Rita kiásott egy árkot egy lapáttal.

'Rita dug a trench with a shovel.'

(b) *A lapát kiásott egy árkot.

'The shovel dug a trench.'

(12) (a) Rita kiásott egy árkot egy exkavátorral.

'Rita dug a trench with an excavator.'

(b) Az exkavátor kiásott egy árkot.

'The excavator dug a trench.'

An interim summary

- manner vs. result verbs?

- intermediary vs. facilitating instruments?

- two factors vs. a sinfle factor?

Building up
the lexical-semantic representation

- First step:

(13) (a) 'the event "X acts such that X uses Z"

  causes

  the event "Y begins to be in a state"'

  (b) [[[x ACT] : [x USE z]] CAUSE [BECOME [y STATE]]]

Second step:

(14) CAUSE (as a traditonal semantic primitive)

(15) causation as helping (Koenig et al. 2008: 214):

An eventuality e1 helps the occurrence of token e2

of the event category C iff

(i) there is an ordering of tokens of C a long a **pragmatically** defined scale (ease of performance, how good the resulting state is, fewer unwelcome "side effects";

(ii) e1 caused the token e2 of C to be higher on that ordering than it would otherwise have been.

Third step:

- (16) $CAUSE_\alpha = \{14, 15\}$

- (17) $z_\beta = \{$intermediary instruments, facilitating instruments$\}$

- (18) $([x\ ACT] : [x\ USE_\gamma) = \{+, -\}$

Fourth step:

(19) $[[([x \text{ ACT}] : [x \text{ USE}_\gamma) \, z_\beta \,]] \text{ CAUSE}_\alpha [\text{BECOME } [y \text{ STATE}]]]$

Fifth step:

- (i) if α = (14), then β = intermediary instrument,
- (ii) if α = (15), then β = facilitating instrument,
- (iii) if β = intermediary instrument, then γ = {+, -}, i.e. the optional fragment in round brackets can be present or absent, consequently, an agentive subject can be present or absent (but in the semantic background she is always present), and
- (iv) if β = facilitating instrument, then γ = +, i.e. the optional fragment has to be present (in other words, the instrument–subject alternation cannot emerge).

Conclusions I.

- with a **pragmatically** oriented weaker notion of causation in mind (Koenig et al. 2008: 214), a more solid basis is assumed to determine which verbs alternate and which verbs do not

- cases when a single verb does occur in both constructions are explained by a single underspecified lexical-semantic representation

- syntactic alternations fit a lexical-constructional approach which naturally extends to **lexical pragmatics** (cf. Bibok 2010)

Conclusions II.

- the lexical-pragmatic perspective favoring encyclopedic and contextual information to convert encoded word meanings into full-fledged concepts guarantees an economic way to get constructional meanings which appear in syntactically alternating structures

- in such a case the issue about the direction of their derivation from each other does not emerge either (contra Dudchuk 2007)

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Thank you for yor attention.